



Chocolate, wine grab the headlines

With Valentine's Day approaching, I am wondering about the so-called health benefits of chocolate and wine. I hear a lot about that this time of year, but I'm skeptical. Is there any truth to the hype?

Actually, there is evidence that compounds in chocolate, wine and other foods have properties that may help fight against a wide range of diseases. But if you use that as an excuse to overindulge, you could be doing yourself more harm than good.

These compounds, called flavonoids, are produced by plants. It's important to know that there are many different kinds of flavonoids.

The latest headlines on flavonoids and health focused on diabetes. A study published in the *Journal of Nutrition* combed through data from nearly 2,000 women in the United Kingdom who had completed a food questionnaire, which researchers examined for evidence of consumption of two types of flavonoids, anthocyanins and flavones. The women were also tested for blood glucose, insulin resistance and inflammation, which, when chronic, is associated with diabetes, as well as cancer, depression, heart disease, stroke and Alzheimer's disease.

The women with the highest consumption of flavones and

anthocyanins had lower risks of insulin resistance and inflammation, and better blood sugar regulation.

Interestingly, media stories that covered the study claimed that chocolate was among the foods offering these benefits. It's true that chocolate, especially dark chocolate, contains flavonoids, but it isn't a good source of either anthocyanins or flavones. While those flavonoids might be helpful, it's important to note that chocolate was not examined in this particular study.

Although both flavones and anthocyanins are contained in many plant-based foods, flavones are found primarily in herbs and vegetables such as parsley, thyme, oregano, chili peppers, celery and citrus peel, and anthocyanins are found primarily in berries, red grapes, wine, red cabbage, and other red- or blue-colored fruits and vegetables.

The best guidance? Enjoy your chocolate and wine, but only in moderation, since these foods are also high in calories and sugar. Put your main focus on including a wide range of fruits, vegetables and other plant-based foods in your diet to get benefits related to flavones, anthocyanins and related compounds.

Chow Line is a service of Ohio State University's College of Food, Agricultural, and Environmental Sciences and its outreach and research arms, Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH, 43210-1043, or filipic.3@osu.edu.



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